WorkSafe Bulletin

Diving with a pre-existing medical condition can have serious consequences

Recreational divers, including dive instructors and divemasters, have died because they didn't pay attention to the warning signs. If you have a medical condition, such as diabetes, heart disease, or high cholesterol, you could be endangering your life or the lives of others. If you're a recreational dive instructor or divemaster, you should have regular exams by a physician, and if you have a pre-existing condition, you must disclose that information to the physician during the exam.

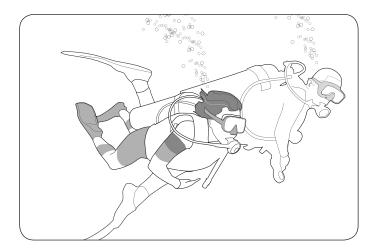
Get a medical exam

You need to ensure you're medically fit to dive. Best practice for recreational dive instructors and divemasters is to have regular exams by a physician who's knowledgeable in diving medicine. What do we mean by regular? Once every two years if you're under 40 years old, and annually if you're over 40.

Workers in similar safety-sensitive occupations, such as commercial divers, commercial pilots, and even recreational pilots, are also required to get regular exams by physicians who are knowledgeable in the discipline.

Disclose medical conditions and impairments

Certifying agencies, such as the Professional Association of Dive Instructors Canada (PADI), require dive instructors and divemasters to disclose to their employers any medical conditions



that could present a risk while diving. This includes mental and physical impairments, such as fitness levels, that may affect your ability to safely perform instructional duties.

PADI and other certifying agencies set the standards for dive instructors. Under those standards, you are required to do the following:

• Pass diving medical examinations performed by a licensed physician

- Maintain the necessary level of fitness to be involved in diving instruction and supervisory activities
- Report the following information to your agency and employer:
 - any changes in your physical health and fitness that could impact your ability to dive safely
 - any incident you were involved in that caused an injury

Instructors and divemasters with medical non-teaching status are not allowed to return to active status until they've been cleared by a licensed physician.

What if you have a pre-existing medical condition?

Dive instructors and divemasters who have a family history of heart attack or stroke, or who have had a heart attack or stroke, should be examined by a physician to determine if they're medically fit to dive.

Depending on the severity of your medical condition, your physician may still give you a certificate of medical fitness to dive — but he or she should monitor you regularly for changes that could affect your medical fitness to dive.

What types of medical conditions could affect your ability to dive safely?

- Diabetes
- Heart disease or coronary artery disease
- Asthma
- High blood pressure
- High cholesterol
- Family history of heart attack or stroke

Factors such as the use of prescription and nonprescription medications, recreational drug and alcohol use, obesity, lack of physical conditioning, and smoking can also affect your safety while diving. Age plays a role too, as it increases your risk of developing diabetes and heart disease.

Note: These are only some of the possible medical conditions and factors.

Diabetes

Dive instructors and divemasters with diabetes are at risk of suddenly losing consciousness, which could result in drowning. That poses a risk not only to you, the instructor or divemaster, but to others involved in the dive.

Heart disease

Divers who show symptoms of heart disease, such as chest pain, shortness of breath, or dizziness while diving, may be at risk of a cardiac event, either during the dive or after, when they surface.

Coronary artery disease

If you have coronary artery disease — also known as hardening of the arteries — or related risk factors, do not dive.

Why not? Hardening of the arteries results in decreased blood flow (oxygen) to the heart; while exercise increases the need for oxygen. Divers with chest or arm pain may be at risk of abnormal heart rhythms or heart attack.

Symptoms of coronary artery disease may include chest and arm pain, particularly if the symptoms appear following exertion.

WorkSafeBC coverage

Dive instructors and divemasters employed by dive shops are considered workers under the *Workers Compensation Act*. If they suffer a work-related injury or disease, they — and their dependants may be compensated by WorkSafeBC. In fact, most people working in British Columbia are covered by us whether they work full time, part time, on contract, as casual labour, or as a principal or owner of a company. You're covered even if your employer fails to register with WorkSafeBC. (There are some exceptions. For more information, visit the "Do you need coverage?" page on worksafebc.com.)

Health and safety: Who is responsible for what?

The Workers Compensation Act (the Act) specifies duties for employers and workers.

Employers' responsibilities

Employers must ensure the health and safety of their workers — wherever they're working. This includes ensuring that your workers are aware of hazards related to their work, and providing them with information, instructions, training, and supervision.

You must also establish an occupational health and safety program, develop health and safety policies, and conduct risk assessments of all dive sites. Then, develop site-specific procedures that address the hazards at each dive site.

Workers' responsibilities

Workers also have responsibilities under the Act. You must take reasonable care to protect the health and safety of not only yourself, but others, who may be affected by your actions on the job.

What does the Occupational Health and Safety Regulation say?

Every worker, supervisor, and employer covered by WorkSafeBC is legally required to follow the requirements of the Occupational Health and Safety Regulation (the Regulation).

However, recreational diving training sessions are not considered occupational diving operations, which means that recreational dive instructors are not required to comply with the medical certification requirements listed in sections 24.7–24.68 of the Regulation.

There are, however, sections that do apply to dive instructors, divemasters, supervisors, and employers. They include the following:

Physical or mental impairment

Dive instructors and divemasters must inform their supervisors or employers of any physical or mental impairments that may affect their ability to work safely. In addition, they must not knowingly do any work that may create an undue risk to themselves or others.

[See section 4.19(1) of the Regulation.]

Employers and supervisors must ensure that dive instructors with a reported or observed impairment are not assigned instructional activities that could be impacted by the impairment. [See section 4.19(2) of the Regulation.]

What do we mean by physical or mental impairments?

They include possible effects of prescription or non-prescription drugs, fatigue, or a medical condition.

What do we mean by "instructional activities"?

Instructional activities include the supervision, instruction, and safety of students in the charge of the instructor, including in-water rescue.

Small operations: What are the requirements?

Workplaces with fewer than 20 workers must have informal health and safety programs, based on regular monthly meetings with workers. These meetings give workers and supervisors the opportunity to discuss health and safety issues. The aim is to correct unsafe work practices and conditions. [See section 4.19(2) of the Regulation.]

Resources

For more information, go to **worksafebc.com** or call the Prevention Information Line at 604.276.3100, or toll-free 1.888.621.SAFE (7233), and ask for Certification Services.

Our recommendations: A quick overview

In summary, here are our recommendations for dive instructors, divemasters, and their employers:

For dive instructors and divemasters

 Get an examination by a physician who's knowledgeable in diving medicine — every two years if you're under 40 years old, and annually if you're over 40. You can find a list of dive physicians at:

www2.worksafebc.com/PDFs/ CertificationAndTraining/dive_physicians.pdf

- Accurately complete your association's medical statement.
- Participate in safety meetings. Discuss health and safety issues related to your work.

For employers

- Let your instructors and divemasters know that you expect them to be medically fit to perform their duties. And, if you know of or observe symptoms that could be related to a medical condition, ask the employee for a copy of their physician's medical certificate, confirming that he or she is fit to dive.
- Establish an occupational health and safety program, develop health and safety policies, and conduct risk assessments of all dive sites. Then, develop site-specific procedures that address the hazards at each dive site.